Competencies

- 1. Identify key principles of adult learning.
- **2.** Describe age-related factors that influence learning.
- **3.** Identify effective strategies for teaching older adults.
- **4.** Develop effective educational materials in print for older adults.



Content Outline

1. Identify key principles of adult learning.

- A. Only 5% to 11% of what is taught by lecture is retained in the long term. Pure didactic teaching, therefore, is a poor investment in time and energy.
- B. In designing educational programming for any adult, young or old, keep in mind the following basic tenets of adult learning theory:
 - 1. Adults will learn only what they need to learn:

The purpose of teaching should be targeted to what the learner needs and wants to know. Adults must want to learn. They learn effectively only when they have a strong inner motivation to acquire new knowledge or develop a new skill. Ask yourself: "What do learners already know about the subject matter? What skills do they possess? What issues or concerns do they have?" If possible, get learners to help plan an educational event. They will learn more than if they are the passive recipients of "canned" educational content.

2. Adults enter learning activities with experience.

Adults have a vast storehouse of knowledge that they have acquired, in both school and in life. As a result, they have much to contribute to a learning activity, and can relate new learning to a broader base of experience. Teaching methods that reveal, build on, and make use of this experience will produce the greatest behavioral changes.



Content Outline

3. Adults prefer learning that is problem centered.

Adults generally enter a learning situation with immediate intentions to apply learning to life's problems or developmental tasks. They seek practical results from learning. Developmental tasks/problems for older adults might include the following: empty nest, marriage of adult children, divorce, preretirement, retirement, illness or death of spouse, changes in health status, widowhood, remarriage, relocation, preparing for the end of life.

4. Adults learn in a variety of ways.

Most adults (83%) are primarily visual learners; only 11% learn primarily by listening. This is one of the reasons why retention from lectures is so poor. Still other adults learn by doing something immediately with new knowledge (kinetic learners). Educational programming, therefore, should incorporate a variety of different teaching methods, alternating passive and active (involving) methods, and balancing seeing, hearing, and doing (application) activities. As a general rule, introduce a different activity every 20 minutes. Some activities that can introduce variety into a learning program include:

Lecturettes
Case vignettes
Role-plays
Games
Demonstrations
Simulations



Content Outline

Audiovisuals Small group discussions Ice-breakers Self-assessment instruments

5. Adults learn best in an informal learning environment.

Adults will be more likely to contribute and become active participants in the learning process if the learning environment is informal. Room arrangement, the use of ice-breakers to break down barriers between learners, and small group activities will encourage open communications and the risk taking that is necessary for shedding old ideas and habits and acquiring new ones.

6. Adults want guidance not grades.

Confronted with tests, grades, and other devices for evaluation, adults draw back from the whole experience. Guided evaluations of one's own performance measured against one's own goals is best.

2. Describe age-related factors that influence learning.

A. "You can't teach an old dog new tricks." The pervasive belief among young and old that the elderly cannot sharpen or broaden their minds creates a disturbing cycle of mental inactivity and decay. Certainly the less people are challenged the less they perform. Research shows that older people can and do learn new things—and they learn them well. True, the limits of learning, and especially the *pace of learning* are more restricted in age than in youth. And the *conditions for successful*



Content Outline

learning are different for older people than for the young. Our institutions for learning have not adapted to these age differences. One result is that the myth about older people's capacity to grow and learn becomes further entrenched (Rowe, J. W. and Kahn, R. L., 1998. Successful Aging. New York: Pantheon Books).

- B. Conditions for successful learning require involve attention to the following age-related changes:
 - 1. Short-term memory loss. Older people, in general, perform less well than youth in short-term memory. There is a reduction in "explicit memory" that involves the intention to remember, and the subsequent ability to recall something specific on demand. Many older people fear this type of memory loss (e.g., racking the brain for a name that they should remember) as the first sign of cognitive decline. It is, however, common to many older adults as a normal part of aging. While such short-term memory lapses can be frustrating, they need not interfere with learning if memory aids or memory training is used to compensate.
 - 2. Visual changes. Many older adults experience some age-related vision loss. The lens of the eye become denser, more yellow and less elastic affecting older adults' ability to read fine print and see colors at the blue-green end of the spectrum. The capacity of the pupil to adjust to changes in light is also reduced making older adults more sensitive to glare and sudden changes in levels of brightness. Considering that most individuals are primarily visual learners,



Content Outline

- losses in visual acuity can significantly impact learning ability.
- 3. Hearing changes. There is a decline in auditory acuity with age. This age-related hearing loss is usually greater for men than for women. By their 80s, two-thirds of older adults will have some degree of hearing loss.
- 4. *Information processing.* As the brain ages, the rate at which it receives and processes information slows. Links in the brain circuitry get broken requiring neurological "detours" that add to processing time. Such slowing can affect the speed of learning.
- 5. Energy level. An older adult's energy and stamina might be undermined by chronic diseases, such as congestive heart failure or arthritis. The more medications a person takes the greater the likelihood of drug toxicity and interactions that can affect energy and performance, both mental and physical.
- 6. Psychological variables. Many older adults have bought into the belief that "you can't teach an old dog new tricks," and it becomes a self-fulfilling prophecy. Consider the many people for whom retirement is "the end" of a meaningful existence. Like any "muscle" in the body, the intellect can atrophy if there are no opportunities or motivation to exercise it.
- 7. External factors. Background noise or confusion can be distracting to older adults who are less able to handle multiple stimuli and must concentrate on learning tasks. For this reason, distracting stimuli



Content Outline

in the learning environment should be eliminated or kept to a minimum.

3. Identify effective strategies for educating older adults.

- A. Developing educational programming for older adults should incorporate all the principles of adult learning. Specific recommendations for this population include the following:
 - 1. Presentation Skills
 - Get your audience's attention before beginning to speak. Position yourself so you can be seen by all.
 - Have light on your face and stay out of the shadows to be seen clearly.
 - Do not hide your mouth.
 - Ask periodically if your audience can hear you. If you use a microphone, check to make sure the amplification is neither too loud nor too soft.
 - KISS (keep it simple speaker). Distinguish between NEED to know information and NICE to know information and concentrate on the former. Try to cover only three major points per session. Support these main points with both a handout and a visual that outlines these points and guides note taking. Repeat crucial information at least three times.
 - State your most important learning points at the beginning and end of a teaching session.
 - Arrange information sequentially in a logical progression of learning, from simple to more complex information.
 - Use familiar terms. Avoid complex medical terms, jargon, and acronyms.



Content Outline

- Use anecdotes or examples, relevant to learners' experience or use learners' examples to illustrate your points.
- Stop periodically to ask for questions and/or feed-back to check on understanding.
- Use a conversational, interactive style. Get out from behind the lecturn. Circulate around the room but always face learners.
- Speak slowly, but at a natural rate; avoid talking too fast.
- Use clear tones in the lower frequency range—speak deeper, not louder.
- Avoid dropping your voice at the end of each sentence.

2. The learning environment

- Eliminate background noise and distractions.
- Be aware of poor lighting. Choose a room with natural lighting. Have your audience face away from the light (and glare) of a bright window, or adjust shades or curtains as the intensity of natural light changes throughout the day.
- Use high levels of illumination or provide intense lighting for small group tasks.
- Space tables and chairs far enough apart to minimize the background noise of others talking nearby.
- Use chairs that are comfortable and level (neither too low nor too deep) for those older adults who have problems with arthritis or difficulty rising from a sitting position.
- Position hearing impaired individuals near sound absorbing materials like heavy drapes and away



Content Outline

- from large hard wall surfaces that create sound "glare."
- Schedule your learning program for a high-energy time of day. The worst time slot for education is right after lunch.

3. Visual Aids and Audiovisual Aids

- Since most adults are primarily visual learners, adding visual elements in the classroom like audiovisuals, flip charts, and handouts is key. The adage "a picture is worth a 1,000 words" is certainly true within a learning context for older adults. Memory involves the formation of mental images; people think in pictures not in words.
- A visual aid should be easily seen, not verbal and unreadable. We've all been in presentations where the presenter has apologized for poor slides or overheads. If your audience can't see or read it, why use it? This is even more important if the audience is older adults who may have problems with visual acuity to begin with. Here are some guidelines for using visuals in the classroom:
 - —A visual aid helps the learner to "see" the point you are making. Your visuals, therefore, should relate to your key points, showing something of importance such as a key work, thought, or better yet, a picture, cartoon, or video clip. Don't cram too much information into one visual.
 - —Overheads and slides can be used in any size room since image size can be adjusted by the placement of equipment and focus. Use tinted



Content Outline

transparencies for overheads, it's easier on the eyes. For slides, yellow lettering on a blue back ground is the most readable. Rather than turning the lights off, use colors with sharp contrast.

- —If you use audiovisual equipment, make sure you continue to face your audience. Do not face the screen. Remember, seeing your face will enhance understanding.
- —Flip charts and videos should only be used before small groups. For flip charts, use simple block lettering. For those with normal eyesight, lettering that is 1½" high is readable at a distance of 35 feet. For those with low vision, it needs to be larger.
- —Black lettering on a white background offers the greatest contrast and visibility.
- —The normal rule of thumb is 5×5 ": no more than five lines or five words per line, on any visual. For older adults, since the lettering must be bigger, 3×3 may be preferable.
- If there is any way to convey your message with a picture (the one worth a thousand words) DO IT. Besides making your visuals interesting, pictures will aid learning retention more than volumes of words. Think of how Madison Avenue uses visual icons to get you to remember their message and buy their products. The same "sales" technique can work in the classroom.
- If you do use pictures, be careful to select ones that are age-appropriate, non-ageist, and that accurately represent "real" older people—older people



Content Outline

- your audience can identify with. Images should be sharp and clear, not fuzzy.
- Provide your audience with handouts or a workshop packet that gives them copies of your visuals and audiovisuals to follow along. Don't frustrate older learners by expecting them to take copious notes or remember your key points.
- Expect to take more time in teaching older adults so you won't be frustrated if the pace is slower.
- Take the time upfront to establish audience rapport; use small group techniques and ice-breakers to help learners get to know each other.
- Make learning fun and as interactive as possible. If you're doing all the talking, you're doing it wrong.

4. Develop effective educational materials in print for older adults.

- A. Learners retain approximately 20% of what they read. Providing your audience with handouts they can keep and refer to later actually results in greater learning retention than if you just lecture at them.
- B. Your reading materials must be reader-friendly to older eyes. Keep these design issues in mind:
 - 1. Use dark print on light backgrounds. Best is black on white matte, nonglossy paper to avoid surface glare. The greater the color contrasts, the easier it will be for older eyes to read.
 - 2. If you use colors, use autumn colors like brown, orange, and yellow. Avoid violets, blues, and greens, which are more difficult for mature eyes to see.



Content Outline

- 3. Use plain, clear typeface that is at least 12 to 14-point type size. (This type is 12 point.)
- 4. Combine upper and lower case. Avoid using all capital letters, italic, or other ornamental print.
- 5. Limit the amount of information you provide. The more you give people to read, and the busier the copy, the less likely they are to read it. Use bullets and boxes to highlight key information. Use ample spacing and white space to further heighten the readability of the text. Keep the text short.
- 6. Use familiar organizational formats. Standard paragraphs with headings work well.
- 7. In referring to older learners, use terms such as older adults or seniors. Avoid negative terms that suggest that older persons are afflicted, victims of, or suffering from a chronic illness.



Instruments/Scales

Checklist for Educators
Did you assess learners' needs to determine your learning objectives?
Does your educational design reflect "need to know" rather than "nice to know" material?
Is your design problem-centered rather than subject-centered?
Does your design allow for and expect learners to take an active role in their own learning?
—— Have you addressed all three domains of learning (cognitive, affective, and practical) as they apply to your topic?
Does your design employ a variety of educational techniques besides lecture?
—— Have you made it easy for learners to learn by providing handouts that summarize your learning points or guide note taking?
Are all your visuals visible and readable by older eyes?
Have you considered how to make the learning climate informal, respectful, and collaborative?
Have you made learning fun?



Case Study/ Evaluation Strategies

You have been asked by the director of a local senior center to help her formulate and design a "Healthy Aging" educational program for the membership. There are 150 seniors who come to the center on a regular basis, but on any given day there are usually about 60 or 70. Most come to take advantage of the lunch program at the center. Most will leave between 2:00–3:00 P.M.

The majority of the seniors are relatively healthy and can ambulate on their own to get to the center. Nevertheless, they have their share of chronic diseases and sensory impairments. They have a special day program for those members who have early stage dementia or who are in wheelchairs. The general membership on occasion has protested having to interact with their more confused, disabled peers.

The center director has shared with you that the well seniors are concerned about staying well and remaining independent for as long as possible. They worry about being a burden to their families and/or having to leave their homes.

With the members of your small group, answer the following questions based on your understanding of adult learning theory and technique, and the specific educational needs of seniors.

- 1. How will you assess the learning needs of this population in order to select topics that are meaningful to this group of seniors?
- 2. When and where would you hold these educational sessions? How long would they be? How many? Over what time period?
- 3. Identify a potential topic for one of these educational sessions that meets the criteria of helping seniors stay healthy and independent for as long as possible. Then identify the three most important "need to know" learning points you would like to get across.
- 4. What interactive learning activities would you use to engage seniors without lecturing at them?



Case Study/ Evaluation Strategies

- 5. What visuals would you use to support your presentation and to help seniors' learning retention?
- 6. What would you do to make learning fun?



Experiential Activities/ Clinical Experiences

The following can be used with both students and older adults.

- 1. Use ice-breakers to help learners get to know one another better and feel comfortable in the learning environment.
- 2. Use case vignettes to provide a forum for sharing ideas, opinions, feelings, and experiences related to a problem, and to sharpen problem-solving skills.
- 3. Use role-plays to illustrate or demonstrate an interaction, and to help learners develop interpersonal skills such as problem solving, assertiveness, and conflict management.
- 4. Use games to teach in a fun and engaging way. Table games, such as bingo, or television game shows, such as *Jeopardy*, are easy to adapt.
- 5. Use demonstrations to show how to perform a process by giving step-by-step instructions in front of an audience. Have learners repeat the process in a return demonstration.
- 6. Use small group discussions to get everyone involved, not just the more vocal members. Give each small group a task, a question to answer or a problem to solve about the topic.
- 7. Use self-assessment instruments to provide learners with measures of their knowledge, skills, and feelings before and after an educational event. For instance, design a true/false quiz in which the questions correspond to the key points. Go over the quiz by having the audience share their answers and rationale. Encourage discussion and/or debate before revealing the correct answer.
- 8. Make a presentation to older adults in a senior center. Topics might include nutrition, medications, safety, and so on.
- 9. Create an information sheet in print on a health topic to be given to older adults. Show it to some older adults and ask for their reactions to it.



Resources

Barry, C. B. (2000, June). Teaching the Older Patient in the Home: Assessment and Adaptation. *Home Healthcare Nurse*, 18(6).

Beers, M., and Berkow, R. (2000). *The Merck Manual of Geriatrics* (3rd ed.). Whitehouse Station, NJ: Merck and Co.

Crisp Publications. Multiple titles including: 50 One Minute Tips for Trainers Developing Instructional Design/ Using Visual Aids/ Effective Presentation Skills. (800) 323-5800.

Fulmer, T. (1999). Curriculum Recommendations for Resident Training in Geriatrics Interdisciplinary Team Care [Editorial]. *Journal of the American Geriatrics Society*, 47, 1149–1150.

Knowles, M. (1980) The Modern Practice of Adult Education. Chicago: Follett.

Maddox, G. et al. (Eds.). (2001). *The Encyclopedia of Aging* (3rd ed.). New York: Springer Publishing Company.

Mezey, M. et al. (Eds.). (2001). *The Encyclopedia of Elder Care*. New York: Springer Publishing Company.

National Institute on Human Resources and Aging. Needs Assessment: Guidelines for Collecting Data/Low Cost Curriculum Materials on Aging/Training Tips and Techniques/Games and Simulations to Teach Aging/Using Videos and Visual Aids: Tips for Presenters, and Filmographies (Bibliographies of films on aging by topic area). (800) 647-8233.

Scannel, E., and Newstrom, J. Games Trainers Play/More Games Trainer's Play/Still More Games Trainers Play. New York: McGraw-Hill.

